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Transindividual Affect: Gilbert Simondon's Contribution to a Posthumanist Theory of Emotions

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Abstract

The aim of this article is to explore how some aspects of Gilbert Simondon's philosophy of individuation may contribute to outlining a posthumanist theory of emotions. According to Simondon, the relation between affection and emotion is a key case study for examining the transindividual character of psychosocial individuation. Affection and emotion appear to him not as a binary opposition, but as an example of a transductive operation. The article suggests the concept of 'transindividual affect' as a way of challenging some key dualisms (rationality and emotion; the individual and the collective; emotion and affect). From this perspective, Simondon can contribute to a redefinition of the human from the non-dualistic and non-anthropocentric perspective that characterises critical posthumanism.

Keywords

transindividual, affective turn, Simondon, Gilbert, critical posthumanism

Introduction

The aim of this article is to explore how some aspects of Gilbert Simondon's philosophy of individuation may contribute to outlining a posthumanist theory of emotions. By posthumanist theory of emotion we refer to a conceptualisation of affect and emotion from a posthumanist perspective, in particular from what has been called 'the critical posthumanities': a transdisciplinary attempt to redefine the human from a non-anthropocentric and non-dualist perspective. In this sense, affect and emotion play a key role for decentring the privileged position that rationality has had in the humanist definition of the human animal. Human experience is always embodied. As such, it is always embedded in an affective, non-rational domain. Furthermore, the critical posthumanities contend that this embodiment exceeds the realm of the self. The self is just one phase within a larger ensemble that contains physical, organic, social and technical elements. This means that a posthuman theory of emotion should not limit its understanding of affect

and emotion to a non-rational attribute of the individual self (opposed to the rational domain). Rather, it should define them as a network of relations that exceeds the individual body and the individual self.

Through the notions of individuation and transindividuality, Simondon attempts to define a theory of the individual as a metastable phase (and not as a stable entity). Each individuated phase is always in relation to a 'pre-individual' energy that exceeds the individual and allows for its future individuations. In the case of psychic individuation, Simondon (2020, p. 285) argues that this pre-individual energy can only find an adequate output through collective interaction. Affection and emotion represent a key case study for Simondon (2020, pp. 285–290) when exploring the transindividual relation between psychic and collective individuation. As such, affection and emotion appear not as a binary opposition, but as an example of the transductive operation that characterises Simondon's philosophy of individuation.

Thomas Keating (2019) contends that Simondon's notion of pre-individuality allows for a theory of affect as a form of relationality that exceeds the individual self. According to Keating (2019, p. 212), the pre-individual 'responds to a recent call for a conceptual vocabulary of affect capable of apprehending the specific kinds of processes and relations structuring our experience of the world yet exceeding the individual subject'. Because of this, he adds, Simondon's philosophy can productively intervene in 'ongoing debates within the recent turn to affect' (Keating, 2019, p. 213). This article aims to complement Keating's focus on 'pre-individual affect' by suggesting that Simondon's concept of transindividuality is equally important for examining the issue of emotion and affection from a relational perspective. Moreover, through the notion of 'transindividual affect' we aim at highlighting the potential of Simondon's philosophy for contributing to a posthumanist theory of emotion. We contend that transindividual affect allows challenging some key dualisms such as those between rationality and emotion, the individual and the collective, and between emotion and affect.

Posthumanism and Emotions

One of the main goals of critical posthumanism is to redefine the human being from a non-anthropocentric perspective, challenging the centrality of the human, opposed to both nature and technics. As Roelvink and Zolkos (2015, p. 1) put it, 'posthumanism stands for diverse theoretical positions which together call into question an anthropocentric belief in the human as a distinctive, unique and dominant form of life'. Similarly, Katherine Hayles (2014, pp. 95–96) defines the task of posthumanism as 'the deconstruction of the liberal humanist subject and the attributes normally associated with it such as autonomy, free will, self-determination and so forth'. To advance in this direction, posthumanist theories assume pluralistic, multi-layered, and comprehensive approaches that can expand the meaning of inclusiveness beyond the human domain. Posthumanism hence destabilises the limits and the symbolic borders previously established by humanism in a way that the dominant human/non-human dualism has to be reinvestigated through non-oppositional and non-binary perspectives.

Posthumanism is often used as an 'umbrella term' which includes different perspectives: from posthumanism and transhumanism to antihumanism and the metahumanities.¹ Among these visions, one important difference to highlight is that between posthumanism and transhumanism (Roelvink & Zolkos, 2015; Wolfe, 2010). Although they both share a common perception of the human as a non-fixed and mutable being, they do not share the same roots nor the same aims. While posthumanism originates from critical strands of continental philosophy (post-structuralism, post-modernism, deconstruction, cultural, postcolonial and gender studies, etc.) and aims at the redefinition of the

human from non-anthropocentric frameworks, transhumanism is deeply rooted in the Enlightenment, focussing on the technical possibility of human physical and cognitive enhancement. As such, transhumanism could be defined as an 'ultra-' or 'hyper-illumination' that conceives rationality as a supreme value (while trying to overcome the precarity of human corporeality and the irrationality of emotions).

In this sense, both humanism and transhumanism share a sound faith in the self-regulatory powers of human reason. Humanism historically developed as a model of civilisation that has, in turn, shaped an ideal of the Western world corresponding to the universalising powers of self-reflective reason. Within this context, the human subject became a synonym for universal rationality and self-disciplining behaviour. At the same time, alterity, including all non-human entities as well as the emotional and affective spheres of human embodied experience, became defined as its negative and specular counterparts that needed to remain repressed in order to achieve progress and pursue humanist values. This pronounced dualism between rationality and emotions is a key aspect of both humanism and transhumanism and, in turn, one of the main objects of critique for critical posthumanism.

The critique of this dualism, however, is in no way exclusive to critical posthumanism. For a long time, emotions have been at the centre of a debate regarding their relation to knowledge and cognition (Furtak, 2018). On the one hand, there are those who argue that affective feelings are just non-intentional and nonrational physical disruptions and that, as such, must be considered external to the subject's intentional relation to the world (Furtak, 2018, p. 6). On the other side, there are those who claim that emotions have their own 'logic', capable of providing us with a form of knowledge about the world and about the subject that cannot be accessed in rational terms (Furtak, 2018, p. 4).

One episode of this debate is represented by the cognitive and anti-cognitive approaches to emotions (Furtak, 2018, p. 23). The former, developed initially by the Portuguese neuroscientist Antonio Damasio, contends that emotions are 'just as cognitive as other modes of mental activity' (Furtak, 2018, p. 23; see Damasio, 1994). From this perspective, emotions can be distinguished from each other depending on their intentionality.² On the other hand, according to the non-cognitive account, emotions are associated with somatic feelings and are mere expressions of bodily changes. One key proponent of the non-cognitive account is Joseph LeDoux (1996), who argues that emotions are non-cognitive and non-intentional reflexes that fulfil a different function than cognitive activity. This means that, as non-cognitive phenomena, emotions should be differentiated from complex cognitive and intentional processes, such as 'propositional thought, decision-making, memory, and perceptual awareness' (Furtak, 2018, p. 24).

Similarly, one key objective of critical posthumanism is challenging the stark distinction between rationality and

emotions (understood as two discrete elements of human experience). Hence, a posthumanist theory of emotions must distance itself from any understanding of emotion as something that can be neatly separated from cognition and rationality. From this perspective, the humanist (but also transhumanist) dream of an emotion-free rationality appears as a 'chimera' (Nussbaum, 2001, p. 230). As Brian Massumi puts it, rationality needs to accept 'the humbling fact that it does not have to be opposed to passion, and enter into heroic combat with affectivity' (2015b, p. 100).

The Affective Turn

One key conceptual reference for critical posthumanism and for a posthumanist theory of emotions is the 'affective turn'. According to Paasonen et al. (2015, pp. 3–4) the 'turn to affect' in the humanities and the social sciences cannot be considered as a single unitary event, but as an entanglement of different genealogies, traditions and agendas.³ What unifies this entanglement, however, is that all these different approaches extend their 'theoretical investigations to the embodied, the sensory, and the lively in ways that question the anthropocentrism of earlier intellectual inquiry' (Paasonen et al., 2015, p. 4). Furthermore, they all display 'a growing awareness of the limits to knowledge production inherent in research focussed principally on representation, mediation, signification, and subjectivity, which has been dominant in cultural theory for some decades' (Paasonen et al., 2015, p. 4).

According to the perspective of the affective turn, human and social phenomena are not purely the result of rational and discursive processes, but mainly an effect of affective and emotional interactions. As such, the turn to affect argues for an approach to human and social phenomena beyond the domains of discourse, ideology, representation, communication, and rational exchange. Even if there is no consensus on the meaning of affect, it is possible to distinguish those scholars who conceive affect and emotions as two different realities from those who do not. For example, Sianne Ngai (Ngai, 2005, p. 21) states that emotions and affect flow interchangeably because there is only a difference of intensity or degree rather than a formal difference of quality. On the contrary, Brian Massumi (2002) makes a sharp distinction between affect and emotion, a difference that has been germinal for affect theory and for posthumanist approaches to the field of emotions.

Massumi (2002, p. 24) assumes the perspective of a radical gap between content (in the form of signification) and effect (in the form of intensity). He argues that the system of intensity is also the system of the inexplicable, where intensity is equated with affect: an autonomous reality that escapes confinement from a subjective interiority. From here, Massumi (2002, p. 25) defines affect as a 'non-subjective and asignifying force disconnected from

meaningful sequencing' which is 'narratively delocalised'. On the contrary, he defines emotion as a

"subjective content, the sociolinguistic fixing of the quality of an experience which is from that point onward defined as personal. Emotion is qualified intensity, the conventional, consensual point of insertion of intensity into semantically and semiotically formed progressions, into narrativizable action-reaction circuits, into function and meaning. It is intensity owned and recognized." (Massumi, 2002, p. 28)

Following Spinoza, Massumi argues that affect entails neither a subjective nor an objective reality, but relations of forces, body interactions, and dynamic processes of becoming. Affect is thus an intensive force that all bodies, whether human or non-human, exert upon one another by continuously colliding and diverging. As such, the affective turn goes beyond the mere debate between cognitive and anti-cognitive approaches to emotions. The main question is no longer if emotions belong to the intentional or to the irrational sphere of an individual. From the perspective of the affective turn, affect is a relational process that exceeds the singular individual; it is the capacity of 'bodies' to affect and to be affected. Moreover, since affect cannot be reduced to an individual's interiority nor to a signifying dimension, it plays a key role in shifting the understanding of social and political phenomena from discourses, representations and ideologies towards a non-representational analysis of effects and intensities (Massumi, 2002, 2015a, 2015b). Furthermore, since affect precedes the constitution of the human, it can be considered as pertaining to a non-human or inhuman domain.

The importance of affect theory for critical posthumanism has been highlighted by both Rosi Braidotti (2013, 2019) and Pieter Vermeulen (2014). According to Braidotti, attention to affect is necessary in any posthumanist project that aims at creating 'transversal, relational, nomadic assemblages of different beings and life-forms' (2013, p. 193). In this sense, she celebrates the capacity of the affective turn to allow non-solipsistic and non-anthropocentric notions of the theory of emotions that have been key for posthumanism's aim of decentring the universality of humanist values. Aiming at finding a new way of perceiving emotions and embodiment, posthumanism recognises that human life has always been entangled with other species in networks of interdependence. Therefore, affect refers to an emotive and somatic, material and non-material 'force of encounter' that cuts across the human world and makes visible its non-human genealogy.

Furthermore, Vermeulen (2014) has pointed out that the distinction made by Massumi between signifying (subjective) emotions and asignifying (non-subjective) affects plays a key role for posthumanist philosophies. Posthumanism, he argues, may be considered as a theory of the subject as an 'assemblage of affect', a theory aimed at decentring the old certainties of humanism (Vermeulen, 2014, p. 122). By moving away from a strictly anthropocentric perspective

that opposes rationality to irrationality (cognitive to non-cognitive intentionality) posthumanism finds in the difference between affect and emotions a crucial ally. From Massumi's perspective, emotions appear as a 'rationalised' form of affectivity, that is, second-order intensities that depend on a first-order non-human and non-subjective reality. In this sense, posthumanism uses the notion of affect in order to displace 'humanist sensibilities' and to suggest that these sensibilities 'have never been more than an illusion' (Vermulen, 2014, p. 123).⁴

Braidotti (2019, pp. 50–51) sums up the importance of affect for critical posthumanism in the following way:

"posthuman subjectivity starts with the acknowledgement that what defines us as an autonomous capacity is not rationality, nor our cerebral faculty alone, but rather the autonomy of affect as a virtual force that gets actualized through relational bonds [...] Affect is not to be confused with individualized emotions, as meaningful expression of psychological states and lived experiences. Affect needs to be de-psychologized, and to be de-linked from individualism in order to match the complexity of our human and non-human relational universe".

It could be argued that a theory of emotions from the perspective of critical posthumanism must assume a non-dualistic and non-anthropocentric point of view. More precisely, a posthumanist theory of emotion would entail: (a) challenging the humanist distinction between rationality and emotion (as well as the pre-eminence granted to the former); (b) disentangling emotion from the individual self and replacing it with a relational account of affectivity; (c) accounting for the non-representational and non-signifying dimensions of subjectivity; and (d) conceptualising emotion and affect as pertaining also to non-human elements, such as nature and technology. It is in relation to these four points that Gilbert Simondon's philosophy could offer significant insights for advancing a posthumanist theory of emotions. In particular, we propose the notion of 'transindividual affect' as a productive framework from where to address these four points. In the present article, we will attempt to account for the first three. The fourth point (the specific contributions of Simondon's philosophy of technology to a posthumanist theory of emotions) would require further analysis which will be developed in a future publication.⁵

Simondon's Transindividual Affect

Until recently, Gilbert Simondon's philosophy had remained largely unknown to the anglophone academic world. This adds to the already peripheral position that he apparently had in the French philosophical field (Combes, 2013, p. xxi). Besides some scattered mentions by Gilles Deleuze, Bernard Stiegler, and Bruno Latour, his work remained on the margins of France's mainstream philosophy. This has been slowly changing in the last decade. In part, this has been so because of the renewed interest triggered by Deleuze, Stiegler, and Latour's references to Simondon's

philosophy. This has been accompanied by the publication of his theses, articles, conferences and courses, first in French and later translated into other languages, like Spanish, Italian, and more recently English. More importantly, however, the recent valorisation of Simondon's philosophy can also be attributed to the novel perspective it offers to address some contemporary social and technical phenomena (beyond more traditional frameworks in critical theory, cultural studies, and digital humanities).⁶

Simondon's most important work is his 1958 doctoral thesis *Individuation in light of notions of form and information*. This thesis had remained unpublished in its original form until 2005, and it was only translated into English in 2020. In it, Simondon presents a novel and radical theory of being that moves 'across physical, biological, psychosocial, and technological domains' (Combes, 2013, p. 1). He does so in a systematic way that aims at becoming a general ontology of the processes of individuation, unlike previous philosophies concerned either with the study of already individuated beings or with the principles of individuation (hence, Simondon's preferred term of 'ontogenesis' as opposed to 'ontology'). It is also in this thesis, in the section devoted to the study of psychic and collective individuation, that Simondon develops a thorough analysis of the notions of affection and emotion (and the 'transductive' relation between the two).

Individuation

The Introduction to Simondon's 1958 thesis commences by arguing that philosophy had known, until then, only two paths to approach the reality of being: 'a substantialist path, which considers the being as consisting in its unity, given to itself, founded on itself, not engendered and as resistant to what is not itself; and then there is a hylomorphic path, which considers the individual as generated by the encounter of a form and a matter' (2020, p. 1). Both paths, however, can only conceive the reality of being either by following the principles of individuation or by examining an already individuated being. Instead, Simondon wants to reverse these paths and study the reality of being by focusing on the 'operation of individuation as primordial', that is, as 'the basis of which the individual comes to exist [...] and reflect its characteristics' (2020, p. 3). A key concept for achieving this 'ontogenetic' project is that of 'metastability'. According to Simondon (2020, p. 5), traditional philosophy could only think of being through the notion of 'stable equilibrium', that is, through a dualist opposition between 'rest and movement'. This notion 'excludes becoming' since 'a stable equilibrium is achieved in a system when all possible transformations have occurred and no propulsive force remains; all potentials have been actualised, and systems that have succumbed to their lowest energetic levels cannot transform again' (Simondon, 2020, p. 5). It was only with the advances of thermodynamics during the

19th Century that a new notion of stability could be forged, that of metastable equilibrium. According to Simondon (2020, p. 5),

“In order to define metastability, it is necessary to establish the notion of the potential energy of a system, the notion of order, and the notion of the increase of entropy; it is therefore possible to define this metastable state of being, which is quite different from stable equilibrium and rest and which the Ancients couldn’t establish in their search for the principle of individuation because they lacked a clear physical paradigm that could clarify its utilization.”

Hence, metastability does not exclude becoming, but rather considers it an essential element of individuation. An individual is only a phase of metastable equilibrium, a relative reality caught between pre-individual energy and individuated forms. As such, this individual should not be studied as a closed entity or as the actualisation of a pre-given principle of individuation. The individual is only a relative reality, that is, a ‘resolution of a metastable system’ which preserves in itself a certain quantity of pre-individual energy that ensures its potential for future becoming. From Simondon’s (2020, p. 3) perspective, the individual needs to be understood

“as a relative reality, a certain phase of being which supposes a pre-individual reality prior to it and which, even after individuation, does not fully exist all by itself, for individuation does not exhaust in a single stroke the potentials of pre-individual reality, and, moreover, what individuation manifests is not merely the individual but the individual-milieu coupling.”

Furthermore, it is important to highlight that Simondon’s ontogenetic project applies to every domain of being: physical, biological, psychosocial, and technical. It ranges from the study of crystals to that of automated machines, including non-human living organisms as well as human collectives. Most significantly, Simondon’s philosophy examines the relationship between these different domains, resisting the humanist tendency to establish an ontological gap between them. To do so, he introduces the notion of ‘transductive operation’ (2020, p. 13), a process of actualisation in which a given energetic disparity can only be resolved by a phase-shift, a jump from one domain of being to another. A transductive operation, Simondon (2020, p. 13) states, is

“a physical, biological, mental, or social operation through which an activity propagates incrementally within a domain by basing this propagation on a structuration of the domain operated from one region to another: each structural region serves as a principle and model, as an initiator for constituting the following region, such that a modification thereby extends progressively throughout this structuring operation.”

The singularity of the transductive operation is that the new phase must preserve the energetic disparity from the previous phase (pre-individual) in order to ensure its future individuation. This is why every being must be conceived as a

‘metastable’ or ‘transductive unity’ (Simondon, 2020, p. 12; see also Combes, 2013, p. 6). This means that ‘being does not have a unity of identity, which is that of a stable state wherein no transformation is possible; being has a transductive unity, i.e. it can phase-shift with respect to itself, it can overflow itself on both sides from its centre’ (Simondon, 2020, p. 12). This idea of ‘transductive unity’ can offer an important contribution to posthumanism’s critique of ‘fixed identities’: by exploring the extension of each domain of being into the next, Simondon’s philosophy offers an ontological substratum that halts any attempt to conceive reality through the notion of identity. As such, Simondon’s philosophy challenges any anthropological attempt to define an ‘essence of man’ (2020, p. 332).⁷

This article pays particular attention to Simondon’s account of the psychosocial domain. It is in relation to this domain that Simondon develops his analysis of affection and emotion. Following the idea of a ‘transductive unity’, we can already foresee to what degree these notions challenge the presumption that affection and emotion belong to an individual’s ‘interiority’. Instead, affection and emotion are key elements that aid Simondon examining how in each phase-shift, an energetic disparity (‘pre-individual’) must remain in order for a new phase to persevere. In this sense, the passage from affection to emotion is a key case study that allows Simondon explaining psychosocial individuation as a transductive relation between a pre-individual disparity, a metastable individual, and a collective.

As already mentioned, Keating (2019) suggests that Simondon’s concept of the pre-individual can contribute to a better understanding of the notion of affect as a potentiality that exceeds the humanist notion of the subject. ‘Pre-individual affect’, he argues, allows to apprehend ‘the specific kinds of processes and relations structuring our experience of the world yet exceeding the individual subject’ (2019, p. 212). Equally important for this task, however, is Simondon’s concept of transindividuality. Through the notion of transindividual affect it would be possible to identify some key intersecting points not only between Simondon and the ‘turn to affect’, but also between Simondon and critical posthumanism. This, in turn, could contribute to shedding new light on a posthumanist theory of emotions.

Transindividuality

‘Psychosocial individuation’ is the term chosen by Simondon (2020, p. 340) to define that particular form of collective individuation that is neither a reunion of already individuated beings nor a whole new individual in itself. As all other forms of individuation, psychosocial individuation is the result of a transductive operation. To explain the specific form of transductive operation in psychosocial phenomena, Simondon (2020, p. 340) uses the notion of ‘transindividuality’. For Simondon (2017, p. 253), transindividuality is

“a relationship that does not relate individuals by means of their constituted individuality separating them from one another, nor by means of what is identical in every human subject, for instance the *a priori* forms of sensibility, but by means of this weight of pre-individual reality, this weight of nature that is preserved with the individual being, and which contains potentials and virtualities”.

The originality of Simondon’s philosophy is that it conceives human collectives as the result of transindividual operations. In doing so, Simondon avoids the classic dualism of social theory according to which the social is either a reunion of already individuated parts or a totality that pre-exists each individual element. In both cases, society is explained in terms of an already formed individual.⁸ As Muriel Combes (2013, p. 39) puts it, Simondon’s philosophy conceives every subject as a transductive relation between pre-individual energy and the collective. Furthermore, the subject should not be understood as a synthesis of both dimensions, but as a transindividual relation where the pre-individual energy finds new outputs for its ‘resolution’ beyond mere psychological ones. In Simondon’s (2020, p. 355) terms, ‘the purely social and the purely individual exist with respect to transindividual reality as the extreme terms of the entire scope of the transindividual; the individual and the social do not exist as antithetical terms with respect to one another’. The fact that there is no purely ‘psychological individuation’ means that no energetic disparity can be resolved solely in intraindividual terms (Simondon, 2020, p. 179). Psychic life is always caught between the pre-individual and the collective. Put differently, psychic individuation is ‘only accomplished and stabilised in the collective’ (Simondon, 2020, p. 179).

This understanding of the subject establishes a sharp difference between an inter-individual concept of society (i.e., society as a group of already individuated individuals) and a transindividual definition of the collective (Simondon, 2020, p. 180). For this reason, some scholars have highlighted the link between the notion of transindividuality and some posthumanist philosophies (Gil, 2017; Kim, 2017). On the one hand, it challenges the idea of the individual as a fixed identity that pre-exists social relations (e.g. liberal accounts of the individual). On the other hand, it challenges the anthropocentric belief according to which the human animal is a ‘social animal’ by essence (Simondon, 2020, p. 334). Instead, the notion of transindividuality allows examining the operational grey area between pre-individual energy and the collective, between psychic and social individuation. This means that ‘neither an enclosed interior nor a pure exteriority without consistency, psyche is constituted at the intersection of a double polarity, between the relation to the world and others and the relation to self’ (Combes, 2013, p. 30). The psyche is transductive in the sense that it connects these two heterogeneous domains (Combes, 2013, p. 30). And it does so not through synthesis, but through a transductive operation in which the disparity

between the heterogeneous domains remains as the potential energy for future individuations. It is precisely in respect to this issue that Simondon (2020, p. 272) introduces the question of affection and emotion. The analysis of these notions (and the passage from one to the other) allows him to stress the transindividual relation that defines psychosocial individuation. As he puts it (2020, pp. 272–273) the passage from affection to emotions is ‘the transductive form of the psyche *par excellence* [...] a continual link of the individual to itself and to the world’.

Affection and Emotion

The study of affection and emotion is a key aspect of Simondon’s treatment of psychosocial individuation.⁹ These notions unveil the transductive relation of the individual to something that, even though appears as the expression of an interiority, exceeds the limits of the individual. In traditional psychology, affectivity is considered the expression of an individual’s interiority. Even if that interiority remains unconscious, unknown, or a mere instinctive response, this belief presupposes an already constituted and fixed individuality. Against this, Simondon (2020, p. 273) defines affectivity as a pre-individual energetic disparity that is neither ‘a pure relation of exteriority nor an absolute substantiality’.

According to Keating (2019, p. 218), to fully grasp the originality of Simondon’s philosophy of psychic individuation it is important to distinguish between the concepts of affectivity, affection and emotion. Affectivity is a pre-individual energy that exposes any individuated being to an ‘outside’ that exceeds them. As Combes (2013, p. 31) puts it,

“affectivity, the relational layer constituting the centre of individuality, arises in us as a liaison between the relation of the individual to itself and its relation to the world. As such, it is primarily in the form of a tension that this relation to the self is effectuated: affectivity, in effect, puts the individual in relation with something that it brings with it, but that it feels quite justifiably as exterior to itself as individual.”

Affectivity is crucial for the analysis of transindividuality because it shows us that ‘we are not only individuals’, and that the individual ‘is not reducible to the individuated being’ (Combes, 2013, p. 31). As such, affectivity appears as ‘ontogenetically prior’ to affection and emotion (Keating, 2019, p. 218). Affection, on the other hand, is an ‘index’ of affectivity, an individual’s experience of that ‘pre-individual intensity’ that exceeds them as individual. Emotion, finally, refers to the attempt to unify the disparity that characterises affection as an index of pre-individual energy (Keating, 2019, p. 218; Simondon, 2020, p. 289). Keating contends that this threefold conceptualisation of affect in Simondon not only sheds ‘critical attention to impersonal processes and relations exceeding the individual’ but also ‘raises the question of how to specifically theorise these excessive processes and relations without falling back

onto the logics of individualised subjects or bodies' (2019, p. 213).

This becomes clearer in Simondon's (2020, pp. 282–85) discussion on the concept of anxiety. Anxiety emerges when an individual attempts to resolve the pre-individual disparity of affection in a purely intersubjective way. 'Such an attempt is destined to fail', Combes (2013, p. 32) tells us, because 'affectivity is what makes the subject confront a share of pre-individual within it which exceeds its capacity for individual absorption'. As such, anxiety is not a passive effect coming from an exteriority, but the result of an active effort made by the subject to 'resolve the experience of tension between pre-individual and individuated within itself; an attempt to individuate all of the pre-individual at once, as if to live it fully' (Combes, 2013, p. 32). The problem is that for an individual to persevere, a rest of pre-individual energy must remain. This is why pre-individual affectivity can only be resolved at a transindividual level. It is only at this level that the passage from affectivity to emotion can take place and bypass the experience of affection as anxiety. For Simondon, then, anxiety functions as an example of a failed passage from affection to emotion. Its failure stems from trying to resolve this passage with merely intraindividual resources and not in terms of a transindividual operation. In this sense, anxiety lies at the heart of what Simondon (2020, p. 285) calls the 'affective problematic', that is, the transindividual passage from affection to emotion that grounds psychosocial individuation.

Igor Krtolica (2012, p. 73) argues that Simondon's discussion of anxiety is key to the process of psychosocial individuation for at least three reasons. First, it marks the 'threshold' of this process of individuation, 'designating the problematic moment at which the subject feels the necessity to pursue its individuation without yet becoming its operator' (Krtolica, 2012, p. 73). Second, Krtolica (2012, p. 73) adds, anxiety signals 'the constitutive ambiguity' of the concept of transindividuality: 'the transindividual is at once immanent and transcendent to the individual', the condition for psychic individuation and the result of its relation to the collective; transindividuality is both 'a given and a result'. This ambiguity should not be understood as a flaw or a logical inconsistency in Simondon's philosophy, but rather as one of its original contributions to both a theory of emotions and a theory of the subject (Krtolica, 2012, p. 73). Third, and most importantly, the issue of anxiety allows grasping the role of transindividuality in Simondon's theory of emotions, defining the relation between affection and emotion not in teleological but in heterogeneous terms (Krtolica, 2012, p. 74). It is precisely in relation to these three points that we define Simondon's theory of emotions with the concept of 'transindividual affect'.

In Simondon (2020, p. 285), the heterogeneous relation between affection and emotion cannot be disentangled from the relation between sensation and perception. This means that the transindividual resolution of emotion and

perception (i.e. the emergence of psychosocial individuation) requires both domains and hence should not be considered independently from each other. In relation to sensation and affection, Simondon (2020, p. 287) emphasises their 'differential' and 'directional' character. This means that sensation and affection take place 'within a spectrum' (Simondon, 2020, p. 288). In Keating's (2019) terms, sensation and affection constitute 'impersonal intensities' (p. 213), that is, 'indexes of pre-individual affectivity' (p. 218). In the specific case of affection, the spectrum of this intensity ranges between pain and pleasure (Simondon, 2020, p. 288).¹⁰ It has been mentioned that affectivity is not something that 'belongs' to a subject's interiority, but rather a pre-individual energy that both precedes and exceeds the individual (Keating, 2019, p. 213). Affection, hence, relates to 'a subjective transductive reality' (Simondon, 2020, p. 288), that is, to a subjective reality that is always in relation to an exteriority (even if that exteriority comes from 'within' the individual). Each state of a living being is polarised in accordance with two exteriorities: 'the world on the one hand and [...] becoming on the other' (Simondon, 2020, p. 288). Sensations are the differential grasp of a direction coming from the world, while affections are the way through which a living being relates to its own becoming as a living being, that is, the grasping of the differential and directional pre-individual reality that allows psychosocial individuation. As such, affections 'constitute an orientation of a part of the living being with respect to itself' (Simondon, 2020, p. 288). These orientations never fully 'coincide' with the subject nor with 'the totality of its states' (Simondon, 2020, p. 288), precisely because they are an 'index' of a pre-individual disparity that exceeds the subject (Keating, 2019, p. 218).

At some point however, the plurality of sensation 'calls for perceptive unification and knowledge of the object, just as the plurality of affective subsets calls for the birth of emotion' (Simondon, 2020, p. 289). This is the condition of possibility of psychosocial individuation: an energetic disparity that cannot be resolved by a living organism solely in intraindividual terms, solely in terms of affection and sensations. For Simondon (2020, p. 289), the passage from affection to emotion occurs when

"the integration of the current state into a single affective dimension is impossible, just as perception arises when sensations call for incompatible tropisms. Just as perception is sensorial contradiction, emotion is affective contradiction overcome".

Put differently, the 'non-coincidence of affections' calls for a process of unification under a given emotion (Simondon, 2020, p. 289). As Pascal Chabot (2013, p. 97) puts it, 'perception brings a solution to the problem posed by a flood of sensation [and] emotion brings order to the chaos of our affects'. Emotion can be understood then as an 'integration' of 'affective disparity' (Simondon, 2020, p. 289). However,

this 'solution' generates 'new problems' (Chabot, 2013, p. 97).

As an integration of affection, emotion is 'totalitarian'. This means that after acquiring a given form, emotion perpetuates this form and imposes it 'as a system that acts as its own support; there is a tendency of the being to persevere in its being on the level of perception and on the level of emotion, but not on the level of sensation or affection' (Simondon, 2020, p. 290). Affection is not 'self-sustained', it is not 'determined in itself by a self-conditioning' (Simondon, 2020, p. 290). On the contrary, emotion is 'metastable', it 'clings to the present and resists other possible emotions' (Simondon, 2020, p. 290). Hence, only a disruption of this 'metastable equilibrium' can replace an already formed emotion. As Simondon (2020, p. 290) puts it, 'one emotion only comes after another emotion due to a sort of internal break'.

Nevertheless, despite being more stable than sensation and affection, perception and emotion are still metastable states, that is, 'activities that correspond to a transitory mode' (Simondon, 2020, p. 290). This means that in spite of their integrative function (their 'totalitarian' tendency), emotions never fully coincide with a subjects' interiority; in fact, they often produce new forms of incompatibility (Chabot, 2013, p. 97). Due to the affective disparity that remains as pre-individual energy, emotions 'require a higher integration, an integration that the being cannot effectuate with its pure constituted individuality' (Simondon, 2020, p. 290). In this pre-individual disparity that persists, the individual 'experiences its limited nature' (Simondon, 2020, p. 290). Hence, for the passage from affective disparity to emotion not to derive in an experience of anxiety, it must be resolved at a transindividual level (Krtolica, 2012, p. 79). As Simondon (2020, p. 290) explains,

"to unlock the possibility of the formation of a network of key points that integrates all possible points of view and for the formation of a general structure of the manner of being that integrates all possible emotions, a new individuation must occur that includes the rapport to the world and the rapport of the living being to other living beings."

This new individuation is that of the collective, the transindividual, 'the mixed and stable kernel' within which 'emotive plurality' can find the interaction between multiple points of view (Simondon, 2020, p. 291). Emotion is thus defined as 'the capacity of the individuated being to provisionally disindividuate in order to participate in a broader individuation' (Simondon, 2020, p. 180). The collective (the transindividual) offers a higher degree of metastability ('a broader individuation') where the plurality of emotions can persevere in time (Simondon, 2020, p. 291).

As part of his examination of affection and emotion, Simondon (2020, p. 291) distinguishes between signals and signification. Based on this distinction, Simondon states that significations appear when there is an operation of

individuation. The individual, hence, is understood as that 'through which and in which significations appear, whereas there are only signals between individuals' (Simondon, 2020, p. 291). Put differently, when a signal triggers a process of energetic transformation (an operation of individuation) that 'resolves' a given energetic incompatibility, we can speak of signification. Simondon (2020, p. 344) then uses this distinction between signals and signification to suggest that the 'collective', that is, transindividuality, is the condition of possibility for a signal to become 'significant'. To discover the signification of a signal entails discovering a collective ground between its source and its receiver. In the case of the passage from affection to emotion, the latter gain metastability 'by integrating with a stable network of shared significations' (Chabot, 2013, p. 98). In this sense,

"there is no difference between discovering a signification and existing collectively with the being relative to which the signification is discovered, since signification is not of the being but between beings, or rather across beings: it is transindividual" (Simondon, 2020, p. 344).

It is interesting to note that here Simondon is not restricting signification to a human domain. Signification occurs every time a given signal triggers an energetic transformation (an operation of individuation) in the receiving being (see Simondon, 2010). This shared ground between transindividual affect and signification (Chabot, 2013, p. 98) can be further examined through the notion of information.

Information

According to Chabot (2013, p. 79), Simondon's 'unified theory of being' is based primarily on the concept of information. To understand the specific definition of this concept in Simondon, Chabot argues for a distinction between three approaches to information: syntactical, semantic and pragmatic (2013, p. 79). A syntactical approach to information focuses on 'how information is to be coded, the channels of transmission, the physical capacities of information systems, and issues of redundancy and noise' (Chabot, 2013, p. 79). In a semantic approach, on the other hand, 'the primary concern is the meaning of the symbols that constitute a message' (Chabot, 2013, p. 79). Simondon's definition of information, however, is neither syntactical nor semantic, but pragmatic. This means that Simondon's main concern is 'how does information affect the behaviours of transmitter and receiver?' (Chabot, 2013, p. 80). As Chabot (2013, p. 80) puts it, Simondon 'viewed information as an operation. Its function is not only one of determination; it causes a mutation, it triggers change. Information becomes the factor that sets in motion the process of individuation'.

In a 1962 conference, Simondon (2010) proposed that the notion of information should not be reduced to a signal or to its transmission channel, as information theory often does (and which defines the 'syntactic' approach). This implies

that information should not be thought of as a ‘thing’, but rather as that which triggers an ‘operation’, that is, an energetic transformation in a metastable system (2010, p. 159). Information should not be defined beyond the operation of reception and the transforming act that this reception may trigger (Simondon, 2010, p. 159). In Simondon’s ‘pragmatic’ approach, information is defined by its capability to trigger change in a metastable system (Simondon, 2010, p. 159). Likewise, a receiver of information is virtually every reality that does not entirely possess in itself the determination of its future individuations (Simondon, 2010, p. 159). In other words, every metastable system is a potential receiver of information, that is, a receiver of a signal that will trigger a process of individuation. When this happens, information becomes signification.

Furthermore, Simondon (2010, pp. 161–173) distinguishes and analyses three types of transformation (‘amplification’) produced by information: transductive, modulating, and structuring. The most elementary operation of information that triggers a change in the receptor’s metastability is that of ‘transductive amplification’ (Simondon, 2010, p. 161). In all three types of amplification, information reaches a metastable system and triggers a process of energetic transformation. What is singular about transductive amplification is that each new element of the transformed reality functions as a new source of information for the following layer in the system. Two examples of transductive amplification provided by Simondon are the process of crystallisation and the propagation of a wildfire in a forest. In both cases, the transforming layer (crystallising; burning) functions as the new emitter of information for the adjacent layers of the metastable system. Another example provided by Simondon (2010, pp. 163–164) is that of ‘psychosocial phenomena’ such as the propagation of a rumour or the outbreaking of a social revolt. A purely psychological phenomenon would be one that occurs strictly within the individual but is not perceived by other individuals as significant (i.e., as information). In a context in which a large number of individuals share a tense metastable set of emotions (e.g., fear, uncertainty, vulnerability, anger, etc), even small psychological changes operate as new sources of information, that is, are perceived by other individuals as highly significant (Simondon, 2010, p. 163). When a certain threshold is reached, an individual emotion in one individual can trigger an emotional response in those who perceived it as significant. This may lead to the spread of a psychosocial phenomenon at a scale, speed and reach that could not be explained nor anticipated by looking only at the initial triggering phenomenon. In other words, the signification that a given piece of information may have for generating psychosocial phenomena can only be properly grasped in relation to the metastable energy contained in a given recipient.

Simondon’s concepts of information and transductive amplification might be of particular interest to the analysis of transindividual affect for at least two reasons. On the

one hand, the pragmatic approach to information defines a type of signification that goes beyond the dualist opposition between cognitive and non-cognitive accounts of psychosocial phenomena (and beyond anthropocentric accounts of signification). On the other hand, Simondon’s description of psychosocial phenomena as a form of transductive amplification highlights the transindividual character of affect beyond the individual-collective dichotomy. Both reasons allow advancing in the direction of a posthumanist theory of emotions.

Conclusion

It was shown above that several scholars have emphasised the link between critical posthumanism and the affective turn (Braidotti, 2013, 2019; Roelvink & Zolkos, 2015; Vermeulen, 2014). Additionally, it was mentioned that Keating (2019, p. 213) argued for the importance of Simondon’s notion of the ‘pre-individual’ to productively intervene in this ‘turn to affect’ of the humanities in a way that could highlight how affect exceeds the individual self while at the same time avoiding ‘falling back onto the logics of individualised subjects or bodies’. In this article we have tried to show how Simondon’s concept of transindividuality can complement and expand Keating’s claim. Furthermore, using the notion of ‘transindividual affect’, we can show Simondon’s potential contribution not only to ongoing debates in critical posthumanism but also to outlining some guiding principles for a posthumanist theory of emotions. This can be summed up in at least three points.

First, Simondon’s notion of ‘transductive operation’ allows for a novel understanding of the relation between human and non-human entities that is neither dualistic nor anthropocentric. Through this notion, Simondon examines the passages from one level of individuation to the next (physical, vital, psychosocial, and technical). Each passage is the result of a ‘problem’, that is, an unresolved energetic disparity. What is most significant is that Simondon shows that each level of individuation must contain in itself a pre-individual energy from the previous levels in order to ensure future individuations (and hence persevering in a metastable state). In this sense, Simondon’s notion of transductive operation offers a productive theoretical ground for critical posthumanism through which the relation between human and nonhuman elements challenges an ontological gap between them. Instead, the transductive operation is aimed at examining the grey operational area through which the phase-shift from one individuation to the next takes place. This results in a blurring of the humanist limits that have been historically used to differentiate humans from both nature and technology. The transductive operation hence offers a concrete conceptual apparatus through which we can explore the relation between these spheres without falling prey to a dualist and anthropocentric framework (e.g. rationality and emotions; human and machines;

cognitive and non-cognitive; etc.). As stated above, the specific analysis of how Simondon's philosophy of technology can contribute to a posthumanist theory of emotion will be developed in a future article.

Second, Simondon's notion of 'transindividuality' allows decentring the notion of the human as a self-identical individual. It also challenges social theories that conceive the individual as a mere effect of the social. Against the dualism between psychological and sociological understandings of the individual, transindividuality defines the common ground in which psychosocial individuation takes place. In this sense, transindividuality strengthens the belief of critical posthumanism according to which relations come before individuated beings. As such, it decentres the humanist belief on an *a priori* and self-determined autonomy of the individual. At the same time, it decentres sociological definitions of the collective. Transindividuality can hence contribute to a novel understanding of the subject as a metastable entity that requires the collective in order to constantly 'resolve' its internal 'problematic', that is, the energetic disparity that stems from its relation both to itself and to the world. Moreover, the concept of 'transindividual affect' assumes that emotions are neither a purely individual nor a purely social expression, but the result of a transindividual operation in which a pre-individual potential (affection) finds a metastable continuity (emotion). In this sense, Simondon's account of transindividual affect appears more complex and nuanced than Massumi's distinction between affect and emotion. Rather than simply opposing emotion and affect (as personalised feelings and depersonalised intensities), Simondon shows that emotion is a metastable state that integrates affective intensities only through a collective, transindividual relation. Put differently, emotions entail a process of 'provisional disindividuation' that allows for the individual to 'participate in a broader individuation' (Simondon, 2020, p. 180). Thus, we believe that the concept of 'transindividual affect' can offer a more solid framework for a posthuman theory of emotions than Massumi's theory of affect.

Finally, in relation to the question of signification, Simondon does not simply oppose emotion and affect as signifying and asignifying domains (nor as cognitive and non-cognitive phenomena). Simondon conceives signification beyond the anthropocentric domain of 'meaning', 'language', 'knowledge' or 'intentionality'. Signification, for him, is the capacity of a signal to trigger a (collective) operation of individuation ('amplification'). In this sense, Simondon's account of signification and information allows advancing in the posthumanist 'reimagining of the human as deeply embedded in its biological and technological world' (Roelvink & Zolkos, 2015, p. 2). At the same time, Simondon's (2010) analysis of psychosocial phenomena from the perspective of information and signification may allow for a more complex and subtle framework than Massumi's rather stark opposition between signification (emotion) and intensity (affects).

Roelvink and Zolkos (2015, p. 2) have attempted to show an intersection between the 'posthumanist project of radically reconfiguring the meaning of the "human" in light of the denunciation of the unified and bounded subjectivity' and 'the insights coming from recent scholarship on affect and feeling about the subject, sociality, and connectivity'. In a similar vein, we have attempted to highlight the significance of Simondon's philosophy to such an enterprise. In this sense, we believe that transindividual affect appears as a productive conceptual apparatus from where to begin outlining a novel theory of emotions that responds to a redefinition of the human from the non-dualist and non-anthropocentric perspective which characterises critical posthumanism.

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Notes

1. Richard Grusin (2015) speaks of the "nonhuman turn". Accordingly, Douglas Porpora (2017) speaks (critically) of a tendency towards "dehumanisation in theory".
2. According to Furtak (2018, p. 7), intentionality refers to the property of thought, perception or emotion to be "directed towards an object". Intentionality, he says, "is the property of mental states by virtue of which they are directed at, about, of, or toward persons, things, ideals, places, situations, and so on" (Furtak, 2018, p. 7).
3. Paasonen et al. (2015, p. 4) suggest that there are at least eight different trajectories that contribute to the "turn to affect": "(1) the tradition of phenomenological and postphenomenological theories of embodiment; (2) explorations of human-machine relations in traditions such as cybernetics, artificial intelligence, neuroscience, and robotics; (3) non-Cartesian philosophical traditions drawing on the work of Baruch Spinoza, such as feminist research, Italian autonomism, political philosophy, and philosophically inflected cultural studies; (4) psychological and psychoanalytical inquiries; (5) feminist, queer, subaltern, and other politically engaged work concerned with materiality; (6) critiques of the linguistic turn and social constructivism in cultural theory; (7) studies of emotion and critiques of the ideal modern subject; and (8) science and science studies embracing pluralist approaches to materialism". For an overview of the "affective turn", see also Clough and Halley's (2007) and Seigworth and Gregg (2010). For a critical approach to the turn to affect, see Leys (2011).
4. Similar to Cary Wolfe's (2010) definition of the temporality of posthumanism, Vermeulen (2014, p. 122) underlines the presence of a double temporality of a posthumanist theory of affect: institutionally, the affective turn comes after humanism, developing a deconstructive critique of its core principles and values; at the same time, "on the level of content", it refers to those forces that "precede human life". This is why

- Massumi (2002, p. 128) can argue that “the extension into the posthuman is thus a bringing to full expression of what the human shares with everything it is not: a bringing out of its inclusion in matter”.
 5. Regarding the relation between affect and technology, some research has been developed by Ash (2015). Ash attempts to use Simondon’s philosophy of technology (2017) in order to suggests “that technical objects can be understood as assemblages of matter, which are organised by material thresholds that shape their capacity to affect” (Ash, 2015, p. 84). We expect to develop the role of technology for a post-humanist theory of emotions in a future article.
 6. For some examples of how Simondon has been used to explore contemporary phenomena, see: Wark and Sutherland (2015); Tucker (2013); Hui (2015); Celis Bueno (2020); and Vaccari (2020).
 7. For an analysis of the issues of humanism and anthropology in Simondon, see Barthélémy (2010).
 8. According to Simondon (2020, pp. 330–331), the division between psychology and sociology in the human sciences responds to the absence of an adequate notion of transindividuality capable of grasping the common ground of both disciplines beyond the individual/society dualism.
 9. For further analysis of the issue of affection and emotion in Simondon’s philosophy, see: Venn (2010); Heredia (2012); Krtolica (2012); Combes (2013); Chabot (2013); Tucker (2018); and Keating (2019).
 10. According to Simondon, pain and pleasure operate as the “conditions of possibility” of affectivity and should not be considered as having a positive existence (2020, p. 285). They are directions towards which a “subjective transductive reality” can be oriented towards (Simondon, 2020, p. 288).
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